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DATE MAILED: 02/05/2003

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|---|----------------|----------------------|---------------------|-----------------|
| 09/645,807 | 08/24/2000 | Volker Weinrich | GR 97 P 1861 D | 4185 |
| | 590 02.05.2003 | | EXAM | NER |
| Lerner and Greenberg PA Post Office Box 2480 Hollywood, FL 33022-2480 | | | AHMED, SHAMIM | |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | ART UNIT | PAPER NUMBER |
| | | | 1765 | 4 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application N | 0. | Applicant(s) | |
|--|--|---|---|---|--|
| | | 09/645,807 | | WEINRICH ET AL. | |
| | Office Action Summary | Examiner | | Art Unit | |
| | | Shamim Ahm | ed | 1765 | |
| | - The MAILING DATE of this communication a | appears on the co | ver sheet with the c | orrespondence address | |
| eriod for | r Reply | | | | |
| THE N - Exten after S - If the - If NO - Failur - Any re earne | DRTENED STATUTORY PERIOD FOR REF MAILING DATE OF THIS COMMUNICATION is sions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a reperiod for reply is specified above, the maximum statutory perion to the period for reply within the set or extended period for reply will, by state ply received by the Office later than three months after the main digital patent term adjustment. See 37 CFR 1.704(b). | N. 1.136(a). In no event, he reply within the statutory old will apply and will extend the applicable to the statutory. | nowever, may a reply be tin minimum of thirty (30) day bire SIX (6) MONTHS from | nely filed is will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | |
| tatus | Responsive to communication(s) filed on 2 | 26 June 2002 . | | | |
| 1)[] | · · | This action is no | n-final. | | |
| 2a) | Other this application is in condition for all | owance except fo | or formal matters, p | rosecution as to the merits is | |
| 3)[] | closed in accordance with the practice und | der Ex parte Qua | yle, 1935 C.D. 11, | 453 O.G. 213. | |
| | ion of Claims | | | | |
| 4)[· | Claim(s) 1-14,21 and 22 is/are pending in t | the application. | | | |
| | 4a) Of the above claim(s) is/are with | drawn from cons | deration. | | |
| 5) | Claim(s) is/are allowed. | | | | |
| 6)[| Claim(s) 1-14,21 and 22 is/are rejected. | | | | |
| 7) | Claim(s) is/are objected to. | | | | |
| | Claim(s) are subject to restriction ar | nd/or election req | uirement. | | |
| • - | ion Papers | | | | |
| 9)[| The specification is objected to by the Exam | niner. | ar h) Conjected to | by the Examiner | |
| 10)⊡ | The drawing(s) filed on 24 August 2000 is/a | ire: a) <u>l≾l</u> accepted | o hold in abevance | See 37 CFR 1.85(a). | |
| _ | Applicant may not request that any objection to The proposed drawing correction filed on | o the drawing(s) of | erreid in abcydnes. | roved by the Examiner. | |
| 11) | The proposed drawing correction filed on | is. a) app | re action | , | |
| | If approved, corrected drawings are required in | | o detterm | | |
| | The oath or declaration is objected to by the | C Examinor. | | | |
| Priority — | under 35 U.S.C. §§ 119 and 120 | roian priority und | er 35 II S.C. 8 119 | (a)-(d) or (f). | |
| | Acknowledgment is made of a claim for fo | reign priority and | C1 00 0.0.0. 3 1 10 | | |
| а |) All b) Some * c) None of: | manta haya heen | received | | |
| | Certified copies of the priority docur Certified copies of the priority docur | ments have been | received in Applica | ation No. | |
| | 2. Certified copies of the priority docur3. Copies of the certified copies of the | nents have been | ts have been rece | ived in this National Stage | |
| * | application from the International See the attached detailed Office action for a | al Bureau (PC) F a list of the certifi | ed copies not recei | ved. | |
| 14) | Acknowledgment is made of a claim for dor | mestic priority un- | der 35 U.S.C. § 11 | 9(e) (to a provisional application) | |
| | a) The translation of the foreign languag Acknowledgment is made of a claim for do | e provisional apr | lication has been r | received. | |
| Attachme | | | | | |
| 2) No | otice of References Cited (PTO-892) otice of Draftsperson's Patent Drawing Review (PTO-94 formation Disclosure Statement(s) (PTO-1449) Paper N | 18) lo(s) | 4) Interview Sumn 5) Notice of Inform 6) Other: | nary (PTO-413) Paper No(s) nal Patent Application (PTO-152) | |
| .S. Patent an | d Trademark Office | fice Action Summar | | Part of Paper No. 5 | |

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

It is noted that the applied prior art does not teach that the first conductive layer is unetchable by chemical dry etching.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 3. Claims 1-14 and 21-22 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for "etching the first conductive layer with a plasma etching process" recited on pag11, lines 11-25 and page 16, lines 6-26, does not reasonably provide enablement for "forming a first conductive layer of a material which is substantially unetchable by chemical dry –etching" in claim 1, lines 3-
- 4. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. The specification recites that the first conductive layer is subjected to chemical/physical dry etching in a reactive ion etching process, which does not reasonably provide enablement for having the first conductive layer, which is unetchable by chemical dry-etching.

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4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 5. Claims 1-14 and 21-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- Regarding claim 1, lines 3-4, the use of the phrase "forming a first conductive layer of a material which is substantially unetchable by chemical dry –etching" renders the claim indefinite because it is unclear whether the material of the first conductive layer is unetchable to any chemical dry-etching process or to a specific chemical dry etching.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kim et al (5,631,185) and Woo et al (5,405,799) disclose a conventional method for etching a conductive layer using another conductive layer as an etching mask.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shamim Ahmed whose telephone number is (703) 305-1929. The examiner can normally be reached on M-Thu (7:00-5:30) Every Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin Utech can be reached on (703) 308-3836. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-

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872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Shamim Ahmed Patent Examiner Art Unit 1765

SA January 28, 2003